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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686,773	10/11/2000	Timothy L. Racette	99556466	5174

7590

05/31/2002

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EXAMINER

WINTER, GENTLE E

ART UNIT

PAPER NUMBER

1746

3

DATE MAILED: 05/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF3

Office Action Summary	Application No.	Applicant(s)	
	09/686,773	RACETTE ET AL.	
	Examiner	Art Unit	
	Gentle E. Winter	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-5, 7, 9, 11, 13-15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 34, 36, 38, 40, 42, 44, 46, 48 50, 51-56, and 58 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims 11 and 13 of U.S. Patent No. 6,355,072 ('072). Although the conflicting claims are not identical, they are not patentably distinct from each other.

a. Regarding claims 1 and 2 of the instant invention. Claims 1 and 2 disclose a process for cleaning substrates comprising cleaning the substrates with an organic solvent; and removing the organic solvent from the substrates using a pressurized fluid solvent: wherein the organic solvent is of the structural formula is that of glycol ether. Claim 11 of '072, discloses a process for cleaning a substrate which includes using an pressurized fluid solvent as a drying aid and recites the use of an organic glycol ether. Although the conflicting claims are not identical, they are not patentably distinct from each other because both generally describe the same process steps and the same ingredients, used in the same way, and for the same purpose.

b. Regarding claims 3-5, 7, 9, 11, 13-15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 34, 36, 38, 40, 42, 44, 46, 48 50, 51-56, and 58 of the instant invention. Said claims disclose and claim an organic solvent wherein the organic solvent is properly anticipated by claim 13, disclosing an organic solvent is selected from a group consisting of dipropylene glycol n-butyl ether, tripropylene glycol n-butyl ether, tripropylene glycol methyl ether, and mixtures thereof. Although the conflicting claims are not identical, they are not patentably distinct from each other because both generally describe the same process steps and the same ingredients, used in the same way, and for the same purpose, and because both '072 and instant application discloses a means for obviating the need for drying an article that has been cleaned with an organic solvent by using liquid phase carbon dioxide to selectively remove the organic solvent.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1-58 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent 6,280,481 to Storey-Laubach et al. ('481). '481 discloses a process for cleaning substrates comprising: cleaning the substrate with an organic solvent; and removing the organic solvent from the substrates using a pressurized fluid solvent. The organic solvents are listed column 3, line 29 through column 6, line 9.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by *SPIE Micromachining and Microfabrication*, Oct. 1996 to Dyck et al. (hereinafter Article). Article discloses a process for cleaning substrates comprising: cleaning the substrate with an organic solvent; and removing the organic solvent from the substrates using a pressurized fluid solvent. Article discloses generally an organic solvent, to include ethers, see page 5 "Experimental" section.

6. Claims 1, 2, 3, 11-18, 33, 42-49, 57, and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 3,966,981 to Schultz. Schultz teaches the use of liquid carbon dioxide for the removal of organic solvents including *inter alia* diethyl ether; ether alcohols such as ethylene glycol monomethyl and monoethyl ether; halogenated hydrocarbons such as chloroform, ethylene dichloride, perchloroethylene and the like.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over *SPIE Micromachining and Microfabrication*, Oct. 1996 to Dyck et al. (hereinafter Article), in view of United States Patent No. 6,090,771 to Burt et al. Article discloses a process for cleaning substrates comprising: cleaning the substrate with an organic solvent; and removing the organic solvent from the substrates using a pressurized fluid solvent. Article discloses generally an organic solvent, to include methanol and acetone, see page 5 "Experimental" section. While methanol is disclosed as a solvent used in Article, Article fails to explicitly disclose the organic solvents contemplated by claims 2-58. Burt et al. at (column 5, line, line 23 *et seq.* discloses the claimed general structure and its various variants. The artisan would have been motivated to select the instantly claimed organic solvents for at least the reasons explicitly disclosed in Burt et al., namely because

of their solvency characteristics (see for e.g. column 4, line, line 40) and reduced residue and desirable drying characteristics (see for e.g. column 5, line 55 *et seq.*).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant's IDS is considered to be an excellent source of relevant data for the instantly claimed invention. Applicant is thanked for a thorough search of the art. The disclosures of the IDS, in the aggregate, teach most if not all the instant claim limitations.

10. United States Patent No. 6,258,766 to Romack is considered to be substantially cumulative to the teaching of United States Patent No. 6,280,481 to Storey-Laubach

11. The article: *A Citizen's Guide to Solvent Extraction* provides a useful listing of solvents used in the solvent extraction process. See table 1 page 3.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gentle E. Winter whose telephone number is (703) 305-3403. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (703) 308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gentle E. Winter
Examiner
Art Unit 1746

May 24, 2002

A handwritten signature in black ink, appearing to read "Randy Gulakowski". The signature is fluid and cursive, with a large initial "R" and "G".

RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700